

# CALIFORNIA STATE PERSONNEL BOARD

## SPECIFICATION

PROGRAMMER ANALYST  
Series Specification  
(Established July 24, 1975)

### SCOPE

Classes in this series are used to develop methods of applying ~~computer~~ information technology to the solution of problems; to develop and implement complex programs to achieve desired results; to act as leadperson or supervisor over technical personnel; and to do other related work.

<u>Schem</u> <u>Code</u>	<u>Class</u> <u>Code</u>	<u>Class</u>
LM20	1579	Associate Programmer Analyst (Specialist)
LM18	1580	Associate Programmer Analyst (Supervisor)
LM16	1581	Staff Programmer Analyst (Specialist)
LM14	1582	Staff Programmer Analyst (Supervisor)
LM12	1583	Senior Programmer Analyst (Specialist)
LM10	1584	Senior Programmer Analyst (Supervisor)

### DEFINITION OF SERIES

Entry into this series is typically through the Programmer classification.

This class series is differentiated from the Programmer class in that it typically combines the most programming duties with systems analysis responsibilities and/or supervisory duties. The series is differentiated from the ~~Data Processing~~ Information Systems Analyst series in that incumbents are not typically involved in complex feasibility studies, and they are expected to be capable of performing complex programming tasks.

### FACTORS AFFECTING POSITION ALLOCATION

Variety and complexity of work assignments; i scope and consequence of decisions made; i independence of action and decision; i and leadership or supervision exercised and direction received.

### DEFINITION OF LEVELS

#### ASSOCIATE PROGRAMMER ANALYST (SPECIALIST)

Under general supervision, independently performs programming and analysis work, and/or acts as leader of a team of programmers, and/or participates with other programmer analysts on projects of a very complex nature or unusually broad scope.

ASSOCIATE PROGRAMMER ANALYST (SUPERVISOR)

Under general supervision, acts as a supervisor of a team of programmers.

STAFF PROGRAMMER ANALYST (SPECIALIST)

Under general supervision, acts as a project leader on complex applications, and/or on complex data processing information technology system problems; and works independently as a technical specialist.

STAFF PROGRAMMER ANALYST (SUPERVISOR)

Under general supervision, acts as a supervisor on complex applications.

SENIOR PROGRAMMER ANALYST (SPECIALIST)

Under general direction, acts as a project leader on the most complex applications, and/or on the most complex data processing information technology system problems; and works independently as a high-level technical specialist.

SENIOR PROGRAMMER ANALYST (SUPERVISOR)

Under general direction, acts as a supervisor on the most complex applications.

MINIMUM QUALIFICATIONS

ALL LEVELS:

~~Experience requirement: State experience applied toward Pattern II must include at least one year in a class at a level of responsibility equivalent to that of experience gained in Pattern I.~~

Experience applicable to one of the following patterns may be combined on a proportional basis with experience applicable to other patterns to meet the total experience requirement.

~~Education: The following education is required when general experience is used to qualify at any level: Equivalent to graduation from college. (Additional qualifying experience may be substituted for up to two years of the required education on a year-for-year basis.)~~

ASSOCIATE PROGRAMMER ANALYST (SPECIALIST)  
ASSOCIATE PROGRAMMER ANALYST (SUPERVISOR)

~~Experience applicable to one of the following patterns may be combined on a proportional basis with experience applicable to other patterns to meet the total experience requirement, provided that the combined qualifying experience totals at least 30 months. Education may not be used to reduce this 30-month limit.~~

Either I

One year of experience in the California state service performing ~~the~~ duties ~~of~~ comparable to a Programmer II.

~~(Persons who have completed six months of service performing the duties of a Programmer II, will be admitted to the examination, but they must satisfactorily complete one year of this experience at this level before they can be eligible for appointment.)~~

Or II

~~Three years~~ Eighteen months of progressively responsible experience above the trainee level in electronic data processing information technology systems study, design, and programming, ~~at least one year~~ of which shall have included responsibility on ~~a~~ an information technology system project basis for analyzing operational methods and developing computer programs to meet desired results. One year of experience in this pattern must include responsibilities under general supervision to plan and develop programs to be processed on information technology systems equipment, perform systems analysis, or systems programming work.

Or III

Equivalent to graduation from a recognized college or university with a minimum of 24 semester or 36 quarter units in information technology-related coursework. (Registration as a senior in a recognized institution will admit applicants to the examination, but they must produce evidence of graduation or its equivalent before they can be considered eligible for appointment.)

STAFF PROGRAMMER ANALYST (SPECIALIST)  
STAFF PROGRAMMER ANALYST (SUPERVISOR)

~~Experience applicable to one of the following patterns may be combined on a proportional basis with experience applicable to other patterns to meet the total experience requirement.~~

Either I

One year of experience in the California state service performing ~~the~~ duties ~~of~~ comparable to an Associate Programmer Analyst (Specialist) or Associate Programmer Analyst (Supervisor).

Or II

~~Four~~ Two years of progressively responsible experience in electronic data processing information technology systems study, design, and programming, ~~at least two years of~~ which shall have included responsibility on a project ~~basis~~ for analyzing operational methods and developing computer programs to met desired results. One year of experience in this pattern must include independent performance of

programming and analysis work, lead of a programming team, or participation as a team member on projects of a very complex nature or broad scope.

Or III

Thirty semester units or 45 quarter units of graduate work in information technology-related coursework from a recognized college or university.

SENIOR PROGRAMMER ANALYST (SPECIALIST)

SENIOR PROGRAMMER ANALYST (SUPERVISOR)

~~Experience applicable to one of the following patterns may be combined on a proportional basis with experience applicable to other patterns to meet the total experience requirement.~~

Either I

One year of experience in the California state service performing ~~the~~ duties ~~of comparable to~~ a Staff Programmer Analyst (Specialist), or Staff Programmer Analyst (Supervisor).

Or II

Two years of experience in the California state service performing ~~the~~ duties ~~of comparable to~~ an Associate Programmer Analyst (Specialist), or Associate Programmer Analyst (Supervisor).

Or III

~~Five years~~ Thirty months of progressively responsible experience in ~~electronic data processing information technology~~ systems study, design, and programming, ~~at least three years of which shall have included responsibility on a project basis for analyzing operational methods and developing computer programs to meet desired results.~~ One year of experience in this pattern must include responsibility as a project leader on complex applications, or resolution of complex information technology systems problems, and working independently as a technical specialist.

KNOWLEDGE AND ABILITIES

ALL LEVELS:

Knowledge of: ~~Electronic computer~~ Information technology system programming, ~~electronic data processing~~ equipment, and its capabilities; principles and techniques of studying work processes for new or revised ~~electronic computer information technology system~~ applications; principles of designing methods of processing ~~data information~~; technical report writing; statistical methods; principles of public administration, organization, and management; principles of personnel management.

Ability to: Write complex programs and develop detailed program specifications; analyze ~~data~~ information and situations, reason logically and creatively, identify problems, draw valid conclusions, and develop effective solutions; apply creative thinking in the design and development of methods of processing ~~data~~ information with ~~electronic computers~~ information technology systems; establish and

maintain cooperative working relationships with those contacted in the course of the work; ~~spea~~~~k and write~~ communicate effectively; prepare effective reports.

ASSOCIATE PROGRAMMER ANALYST (SUPERVISOR)  
STAFF PROGRAMMER ANALYST (SUPERVISOR)  
SENIOR PROGRAMMER ANALYST (SUPERVISOR)

Knowledge of: All of the above, and principles of personnel management, supervision, and training; the department's ~~Affirmative Action Program~~ Equal Employment Opportunity objectives; a manager's role in the ~~Affirmative Action Program~~ Equal Employment Opportunity and the processes available to meet ~~affirmative action~~ equal employment objectives.

Ability to: All of the above, and supervise technical personnel; effectively contribute to the department's ~~affirmative action~~ equal employment objectives.

#### ADDITIONAL DESIRABLE QUALIFICATIONS

##### ALL LEVELS:

~~In appraising the relative qualifications of candidates for all levels, consideration will be given to the extent and type of experience with various electronic data processing system functions and to the extent and type of pertinent education beyond that required under "Minimum Qualifications." Preferred additional education includes courses in computer science and business administration.~~

#### CLASS HISTORY

<u>Class</u>	<u>Date Established</u>	<u>Date Revised</u>	<u>Title Changed</u>
Associate Programmer Analyst (Specialist)	9/1/75	12/4/84	12/4/84
Associate Programmer Analyst (Supervisor)	12/4/84	12/4/84	--
Staff Programmer Analyst (Specialist)	9/1/75	12/4/84	12/4/84
Staff Programmer Analyst (Supervisor)	12/4/84	12/4/84	--
Senior Programmer Analyst (Specialist)	9/1/75	12/4/84	12/4/84
Senior Programmer Analyst (Supervisor)	12/4/84	12/4/84	--